

(d) a fragment of (a), (b), or (c), wherein the fragment has aminopeptidase activity; and

(e) a polypeptide having physicochemical properties of (i) a pH optimum in the range of from about pH 7.27 to about pH 10.95 determined at ambient temperature in the presence of Ala-para-nitroanilide; (ii) a temperature stability of 90% or more, relative to initial activity, at pH 7.5 determined after incubation for 20 minutes at 60°C in the absence of substrate; and (iii) an ability to hydrolyze a substrate containing Ala, Arg, Asn, Asp, Cys, Gln, Glu, Gly, His, Ile, Leu, Lys, Met, Phe, Pro, Ser, Thr, Trp, Tyr, or Val at its N-terminus.

47. The polypeptide of claim 46, comprising an amino acid sequence which has at least 70% identity with the amino acid sequence of amino acids 16 to 496 of SEQ ID NO:2.

48. The polypeptide of claim 47, comprising an amino acid sequence which has at least 80% identity with the amino acid sequence of amino acids 16 to 496 of SEQ ID NO:2.

49. The polypeptide of claim 48, comprising an amino acid sequence which has at least 90% identity with the amino acid sequence of amino acids 16 to 496 of SEQ ID NO:2.

50. The polypeptide of claim 49, comprising an amino acid sequence which has at least 95% identity with the amino acid sequence of amino acids 16 to 496 of SEQ ID NO:2.

51. The polypeptide of claim 50, comprising an amino acid sequence which has at least 97% identity with the amino acid sequence of amino acids 16 to 496 of SEQ ID NO:2.

52. The polypeptide of claim 46, comprising the amino acid sequence of amino acids 16 to 496 of SEQ ID NO:2 or a fragment thereof.

53. The polypeptide of claim 52, comprising the amino acid sequence of amino acids 16 to 496 of SEQ ID NO:2.

54. The polypeptide of claim 47, which is obtained from an *Aspergillus* strain.

55. The polypeptide of claim 54, which is obtained from an *Aspergillus oryzae* strain.

56. The polypeptide of claim 46, which is encoded by a nucleic acid sequence which hybridizes under medium stringency conditions with the nucleic acid sequence of nucleotides 46 to 1488 of SEQ ID NO:1, or its complementary strand, or a subsequence thereof which encodes a polypeptide fragment which has aminopeptidase activity.

57. The polypeptide of claim 56, which is encoded by a nucleic acid sequence which hybridizes under medium stringency conditions with the nucleic acid sequence of nucleotides 46 to 1488 of SEQ ID NO:1 or its complementary strand.

58. The polypeptide of claim 56, which is obtained from an *Aspergillus* strain.

59. The polypeptide of claim 58, which is obtained from an *Aspergillus oryzae* strain.

60. The polypeptide of claim 46, which is encoded by a nucleic acid sequence which hybridizes under high stringency conditions with the nucleic acid sequence of nucleotides 46 to 1488 of SEQ ID NO:1, or its complementary strand, or a subsequence thereof which encodes a polypeptide fragment which has aminopeptidase activity.

61. The polypeptide of claim 60, which is encoded by a nucleic acid sequence which hybridizes under high stringency conditions with the nucleic acid sequence nucleotides 46 to 1488 of SEQ ID NO:1 or its complementary strand.

62. The polypeptide of claim 60, which is obtained from an *Aspergillus* strain.

63. The polypeptide of claim 62, which is obtained from an *Aspergillus oryzae* strain.

64. The polypeptide of claim 1 having physicochemical properties of (a) a pH optimum in the range of from about pH 7.27 to about pH 10.95 determined at ambient temperature in the presence of Ala-para-nitroanilide; (b) a temperature stability of 90% or more, relative to initial activity, at pH 7.5 determined after incubation for 20 minutes at 60°C in the absence of

substrate; and (c) an ability to hydrolyze a substrate containing Ala, Arg, Asn, Asp, Cys, Gln, Glu, Gly, His, Ile, Leu, Lys, Met, Phe, Pro, Ser, Thr, Trp, Tyr, or Val at its N-terminus.

65. The polypeptide of claim 64, wherein the polypeptide has the ability to hydrolyze a substrate containing Ala, Glu, Gly, or Pro at its N-terminus.

66. The polypeptide of claim 64, which is obtained from an *Aspergillus* strain.

67. The polypeptide of claim 66, which is obtained from an *Aspergillus oryzae* strain.

68. The polypeptide of claim 46, which is encoded by the nucleic acid sequence contained in plasmid pEJG18 contained in *E. coli* NRRL B-21677.

69. A method for producing the polypeptide of claim 46 comprising (a) cultivating a strain to produce a supernatant comprising the polypeptide; and (b) recovering the polypeptide.

70. A composition comprising the polypeptide of claim 46 and a suitable carrier.

71. The composition of claim 70, wherein the polypeptide comprises an amino acid sequence which has at least 70% identity with the amino acid sequence of amino acids 16 to 496 of SEQ ID NO:2.

72. The composition of claim 71, wherein the polypeptide comprises an amino acid sequence which has at least 80% identity with the amino acid sequence of amino acids 16 to 496 of SEQ ID NO:2.

73. The composition of claim 72, wherein the polypeptide comprises an amino acid sequence which has at least 90% identity with the amino acid sequence of amino acids 16 to 496 of SEQ ID NO:2.

74. The composition of claim 73, wherein the polypeptide comprises an amino acid sequence which has at least 95% identity with the amino acid sequence of amino acids 16 to 496 of SEQ ID NO:2.

75. The composition of claim 74, wherein the polypeptide comprises an amino acid sequence which has at least 97% identity with the amino acid sequence of amino acids 16 to 496 of SEQ ID NO:2.

76. The composition of claim 70, wherein the polypeptide comprises the amino acid sequence of amino acids 16 to 496 of SEQ ID NO:2 or a fragment thereof.

77. The composition of claim 76, wherein the polypeptide comprises the amino acid sequence of amino acids 16 to 496 of SEQ ID NO:2.

78. The composition of claim 71, wherein the polypeptide is obtained from an *Aspergillus* strain.

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79. The composition of claim 70, wherein the polypeptide is encoded by a nucleic acid sequence which hybridizes under medium stringency conditions with the nucleic acid sequence of nucleotides 46 to 1488 of SEQ ID NO:1, or its complementary strand, or a subsequence thereof which encodes a composition fragment which has aminopeptidase activity.

80. The composition of claim 79, wherein the polypeptide is encoded by a nucleic acid sequence which hybridizes under medium stringency conditions with the nucleic acid sequence of nucleotides 46 to 1488 of SEQ ID NO:1 or its complementary strand.

81. The composition of claim 79, wherein the polypeptide is obtained from an *Aspergillus* strain.

82. The composition of claim 70, wherein the polypeptide is encoded by a nucleic acid sequence which hybridizes under high stringency conditions with the nucleic acid sequence

of nucleotides 46 to 1488 of SEQ ID NO:1, or its complementary strand, or a subsequence thereof which encodes a composition fragment which has aminopeptidase activity.

83. The composition of claim 82, wherein the polypeptide is encoded by a nucleic acid sequence which hybridizes under high stringency conditions with the nucleic acid sequence nucleotides 46 to 1488 of SEQ ID NO:1 or its complementary strand.

84. The composition of claim 82, wherein the polypeptide is obtained from an *Aspergillus* strain.

85. The composition of claim 70, wherein the polypeptide has physicochemical properties of (a) a pH optimum in the range of from about pH 7.27 to about pH 10.95 determined at ambient temperature in the presence of Ala-para-nitroanilide; (b) a temperature stability of 90% or more, relative to initial activity, at pH 7.5 determined after incubation for 20 minutes at 60°C in the absence of substrate; and (c) an ability to hydrolyze a substrate containing Ala, Arg, Asn, Asp, Cys, Gln, Glu, Gly, His, Ile, Leu, Lys, Met, Phe, Pro, Ser, Thr, Trp, Tyr, or Val at its N-terminus.

86. The composition of claim 85, wherein the polypeptide has the ability to hydrolyze a substrate containing Ala, Glu, Gly, or Pro at its N-terminus.

87. The composition of claim 85, wherein the polypeptide is obtained from an *Aspergillus* strain.

88. The composition of claim 87, wherein the polypeptide is obtained from an *Aspergillus oryzae* strain.

89. The composition of claim 70, wherein the polypeptide is encoded by the nucleic acid sequence contained in plasmid pEJG18 contained in *E. coli* NRRL B-21677.